**Learning Journal**

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**Course:** SOEN-6841 Software Project Management

**Journal URL:**

**Week 1:** Jan 16 – Jan 22

**Date:** Jan 28

**Key Concepts Learned:**

Below are the concepts I learnt from this week’s session:

**CHAPTER 1:**

* Software project is constrained by time, budget, and resources.
* Software project management phases:
* Project Initiation, Project planning, Project Monitoring, Project closure.
* Project planning and monitoring phases include software life cycle processes (Requirements, Design, Implementation, Testing, Deployment, Maintenance)
* Project Initiation tasks: Project Schedule, Project Charter, Project Scope, Project Objectives, Effort estimates, Cost estimates.
* Different software project metrics: Relevance, Meaningful, Practical, Calibration Ability, Activity level.

**CHAPTER 2:**

* Project Charter: Purpose for starting a project.
* Project Scope: What all functionalities are required in the project and determine quality of the project.
* Project Objective: What will be the outcome of the project when put in place and how will it help consumers of the software product.
* Project Cost: Directly proportional to size of the project. Also includes effort estimation. Popular technique: Project division can be used to determine the cost where an expert is hired to calculate cost and then bid is conducted.
* Project Schedule: Entire project is broken down into smaller tasks.

**CHAPTER 1 CASE STUDY:**

* This case study explores a software vendor's project to develop the 6.0 version of a SaaS product used by major grocery retailers. Key concepts include:
* It covers project initiation, planning, execution, monitoring, and closure processes.
* Addresses the need for third-party logistics functionality for timely truck information.
* Previous releases focused on transportation cost calculation and basic truck appointment functions.
* This led to the introduction of sophisticated appointment scheduling to reduce truck waiting times.
* This change will aim for cost-effective logistics that will minimize delays through optimized resource coordination.

**CHAPTER 2 CASE STUDY:**

* The project’s focus is on appointment scheduling which is split into four phases for gradual development and testing. Each phase adds more features, like considering truck types, good types, and other factors. The final goal is to build a reliable system that can be used by both existing and new customers.
* Identified a need for better software in the grocery retail supply chain. The existing software covered transportation and logistics but needed enhancements for appointment scheduling and transaction auditing.
* The SaaS vendor's project initiation involves addressing industry gaps, iterative development for comprehensive functionality, a focus on reliability, and a commitment to meeting customer needs in the evolving landscape of supply chain management software.

**Application in Real Projects:**

The concepts learned this week in Software Project Management have significant applications for real-world projects. In case of tight deadlines, prioritizing critical functionalities becomes utmost important to ensure on-time delivery. Project Initiation steps will provide an efficient way of getting started with the project with clear understanding of what to expect during development of the project. This, in turn, facilitates effective communication and alignment of project goals among team members and stakeholders. The awareness of relevant software project metrics, such as Relevance, Meaningfulness, and Calibration Ability, is crucial for project evaluation. Applying these metrics in a real project scenario enables continuous improvement by measuring and analyzing project performance. The technique of project division, involving expert assessment, can enhance cost estimation accuracy. Since the cost and effort analysis is just an estimate in the project initiation phase, it might change as per need during the further phases of development. This could be a challenge, although all the other benefits outweigh it.

**Peer Interactions:**

Had a study session with classmates to go through the case studies and chapters 1,2. During our study session, we collectively reviewed and discussed the assigned case studies. This collaborative effort allowed us to analyze real-world project scenarios, applying the theoretical knowledge gained in class to practical situations. The study session facilitated exchange of knowledge among peers.

**Challenges Faced:**

* Effort and cost estimation could be a challenge in the software development process as it will require clear understanding of all the functionalities of the project. It requires considering real-world case studies and examples to gain a practical perspective.
* Project schedule and team collaboration: The smaller sub goals/sub tasks might be dependent on one another. Delay in completion of one might lead to the other task never getting started which will lead to overall delay of the project.

**Personal development activities:**

* Read chapters 1 and 2 from the textbook.
* Worked on the exercise 1.1 and 2.2.

**Goals for the Next Week:**

* Getting started with the Topic Analysis and Poster Formation- Brainstorm.
* Will complete project initiation tasks to determine Project Charter, Project scope, Project schedule (distribution of sub tasks amongst team members), Project objective and cost estimation.
* Will perform market analysis to determine target audience for the project, analyze competitor’s solutions and provide business outcome of the project.
* Will read chapter 3 and 4 before the class.